

# GENERATION

## **STANDARDS**

### **Unit Equivalent Availability (EAF):**

1. 93% EAF For Cabras 1&2 with no scheduled turbine overhaul
2. 87% EAF For Cabras 1&2 with scheduled turbine overhaul
3. 95% EAF For Cabras 3&4
4. 95% EAF For Combustion Turbines
5. 98% EAF For All other Diesels Units (Fast Track)
6. 98% EAF For Water System Diesel Units (128 fixed and 10 portables)

### **Baseload (RFO) vs. Peaking (Diesel) Units Production**

1. Baseload production shall be 95% of total annual gross production
2. System Heat Rate shall not exceed 9600 BTU/KWH

### **Cabras-Piti Area Intermittent Control Strategy (CPAICS—Fuel Switching):**

1. 100% CPAICS Compliance
2. 99.5% Fuel System Availability
3. No Extraneous Fuel Switching From HSFO to LSFO
4. Mandatory Reporting of All Fuel Switching Events

### **Environmental Compliance:**

1. No Clean Air Act Violations
2. No Clean Water Act Violations
3. 100% Compliance With Existing NPDES Permit
4. 100% Compliance With Continuous Emissions Monitoring For Cabras 3&4
5. 100% Compliance With All Operating Permits For All Units

### **Economic Dispatch:**

1. 100% Compliance of Potential Fuel Savings Identified By Economic Dispatch
2. Mandatory Reporting and Tracking of Unit Dispatching and Fuel Savings

### **Miscellaneous And Supporting Standards:**

1. Certify Cabras 1&2 Boiler
2. Certify All Control Board Operators For Each Generating Station
3. Implement Automatic Remote-Start and Synchronization of CT and Diesel Units
4. Preventive Maintenance Cycles for All CMMS Work Orders Shall Not Exceed 100% Past Due or One Cycle
5. Mandatory Tracking of All Reliability Indices
6. Mandatory Tracking of All Unit Outages and Root Causes

Cont'd Generation Standards:

7. Mandatory Tracking of all Safety Tags and Enforcement on Safety Rules & Procedures.
8. Maintain Overhead Certification for all Plants.
9. Maintain Good Communications within our network.

**Training Standards:**

1. All Generation Training Shall Be Institutionalized With Standard Classroom, Demonstration, Employee On-The-Job, and Subject Matter Check-offs.
2. Training Shall Be Formally Tracked and Reported
3. Re-Fresher, and New Employee Training Shall Be Conducted At Least Annually.
4. Re-Fresher Training in Procurement and Accounting Shall Be Conducted At Least Annually.

**FY 2005 GOALS AND OBJECTIVES**

**Generation Administration**

1. Continue to Develop Apprenticeship program for Cabras 3&4, Combustion Turbines, Central Maintenance, and Diesel sections for operations and maintenance positions.
2. Develop, schedule, track all plant outages for annual schedules and LEAC calculations.
3. Update and maintain all plant production, fuel consumption, and NERC data.
4. Provide Technical & Planning Support for all Generation Sections.
5. Ensure all USEPA, GEPA, Planning & Regulatory reports are submitted bi-weekly monthly, quarterly or annually and correct any discrepancies. (Fuel Switching, SPCC, BMP)

**Cabras 1&2:**

1. Achieve performance guarantees as set forth in the PMC:
  - >80% EAF for Cabras 1&2
  - No more than 3% Heat Rate Deviation
  - Limit Overtime to 15% of Base Labor
  - Complete PIPs/CIPs scheduled for the Contract Year 3 & 4
  - Limit O&M spending to no more than \$1.750 million for Contract Year 3 (2005)
2. Reduce unit outage < 15 times
3. Upgrade Burner management
4. Enforce Boiler tubes life management
5. Enforce water treatment management and implement QA & QC S.O.P

Cont'd Cabras 1&2 Goals & Objectives:

6. Enforce auxiliary equipments management and maintain PM
7. Enforce QA & QC for outage overhaul through Outage Organization
8. Improve maximum generating out put on both unit
9. Improve Boiler combustion management system
10. Upgrade water treatment equipment for unit #1 & #2
11. Minimize inventory stock materials

**Cabras 3&4:**

1. Improve Unit EAF of Cabras 3&4 to no less than 80%
2. Implement new features to the Cabras main engines to reduce overhaul frequency to 8,000 hours-this includes but is not limited to new piston crowns and rings, new cylinder liners, and engine monitoring systems for detailed trending of performance and operation
3. Install new fire protection system improvements to the power station
4. Complete engineering feasibility study regarding the replacement of the 537 and 721 Woodward Systems, and the existing Bailey Control terminal computer system
5. Replace Cabras 3&4 Circulating Water Pump "C"
6. Replace the Lube Oil Sump Pump Motor
7. Complete designs for the repair, replacement or refurbishment of the Sea Water Cooling Pipe for Cabras 3&4
8. Repair and/or re-furbish the Cabras 3&4 demineralizer
9. Conduct annual emissions tests
10. Maintain the Continuous Monitoring System (CEMs) to comply with the plant's Operating Permit
11. Provide maintenance improvements to the plant to include new service air stations, storage areas for tools and flammables and additional maintenance personnel office
12. Fill all critical O&M vacant positions
13. Conduct regular training in the operation and maintenance of the fire protection System
14. Implement inventory safety stock levels for warehouse inventory
15. Install emergency standby generator
16. Maintain all personnel safety requirements – such as annual asbestos and physical examination
17. Provide technical services to maintain and certify the 15 and 180 ton overhead crane
18. Certify all plant elevators
19. Provide annual as-built updates for engineering and architectural drawings

Cont'd Goals & Objectives:

**Combustion Turbines and Diesels:**

1. Perform Major Overhaul of Dededo CT #2 Turbine and repair Generator
2. Review and Refurbish/Upgrade the CT water treatment systems
3. Complete the remote-start and auto synchronization systems at the Tenjo Vista, MDI and Talofoto power plants
4. Replace or Upgrade the Control and Monitoring System for the Yigo and Macheche CTs and provide remote start and auto-synchronization feature
5. Complete design modifications to allow remote start and dead-bus synchronization for Dededo CT#1 and CT#2
6. Install the purchased Mark V system for Dededo CT#1 and CT#2
7. Perform Generator Inspections and Maintenance on all CT Units
8. Refurbish Marbo CT Unit

**Fuel Systems:**

1. Ensure fuel supply and delivery to all operating power stations.
2. Establish in-house testing facility for regular quality testing of stored fuel and lubrication at all generating facilities.
3. Continue to evaluate and assess fuel delivery & receiving pipeline conditions to plan for pipeline repairs & replacements.

**Central Maintenance & WSD:**

1. Maintain & provide adequate support for Major Overhauls and Preventive Maintenance at GPA power plants & generator sites.
2. Continue with required repairs & maintenance of the Tanguisson Pipeline.
3. Perform routine inspections of the Tanguisson Pipeline.
4. Preventive Maintenance Cycle for all CMMS Work Orders shall not exceed 100% past due or one cycle (Water Systems Diesel Engine/Generators)
5. Provide additional support in Machining and Welding for all GPA sections